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**STAFF APPRAISAL REPORT**

**REPUBLIC OF KOREA**

**FOURTH AGRICULTURAL CREDIT PROJECT**

April 29, 1985

Projects Department  
East Asia and Pacific Regional Office

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### CURRENCY EQUIVALENTS

December 1984

US\$1 = 800 Won  
1 Won = US\$0.00125

### WEIGHTS AND MEASURES

|                  |                     |
|------------------|---------------------|
| 1 meter (m)      | = 3.28 feet (ft)    |
| 1 kilometer (km) | = 0.62 miles        |
| 1 hectare (ha)   | = 2.47 acres (ac)   |
| 1 kilogram (kg)  | = 2.205 pounds (lb) |
| 1 ton (t)        | = 1,000 kg          |
|                  | = 2,205 lb          |

### GOVERNMENT OF KOREA FISCAL YEAR

January 1 - December 31

### ABBREVIATIONS

|        |   |   |
|--------|---|---|
| BOK    | - | Bank of Korea   |
| IFAD   | - | International Fund for Agricultural Development         |
| LAO    | - | Loan Appraisal Officer                                  |
| LARISD | - | Law for Acceleration of Rural Income Source Development |
| MAF    | - | Ministry of Agriculture and Fisheries                   |
| MIS    | - | Management Information System                           |
| MOF    | - | Ministry of Finance                                     |
| NACF   | - | National Agricultural Cooperative Federation            |
| PC     | - | Primary Cooperative                                     |
| PIC    | - | Project Implementation Committee                        |
| PIP    | - | Project Implementation Plan                             |
| TU     | - | Technical Unit (NACF)                                   |

KOREA

FOURTH AGRICULTURAL CREDIT PROJECT

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This report is based on the findings of a joint IBRD/IFAD preappraisal mission and an appraisal mission which visited Korea during February and June 1984, respectively. Members of the preappraisal mission were Messrs. T. Daves, R. Deshpande, R. Key and M. Zenick, and Ms. N. K. Hill (IBRD), Messrs. Y. Takano (IFAD), and R. Hoover (Consultant). The appraisal mission comprised Messrs. T. Daves, V. Bhargava and Ms. N. K. Hill (IBRD), Messrs. C. Eugenio and R. Hoover (Consultants).

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MAP No. 12351R3

KOREA

FOURTH AGRICULTURAL CREDIT PROJECT

Loan and Project Summary

Borrower: Republic of Korea

Beneficiary: The National Agricultural Cooperative Federation (NACF)

Amount: \$25 million equivalent.

Terms: Repayable in 15 years including three years of grace, at the standard variable interest rate.

Relending Terms: The Government would onlend the loan proceeds to NACF on substantially the same terms as the Bank loan. NACF would onlend the proceeds to final subborrowers at an interest rate of 3% above the weighted average cost of all funds onlent for subprojects. NACF would bear the foreign exchange risk.

Project

Description: The proposed project would focus on agricultural credit to farmers, farmers cooperatives and small rural businesses to finance investments covering a wide range of agricultural production and other activities that would diversify the sources of rural incomes. It would also address the institutional development issues facing NACF, the main credit institution serving agriculture.

Risks: The main risk associated with the proposed loan is that the investments financed by NACF might lead to over capacity in particular areas, such as orchards or greenhouses. To reduce this risk, the project provides that the subsectoral distribution of onlending would be reviewed annually and appropriate adjustments made to reflect market conditions.

| <u>Project Costs:</u>           | <u>/a</u> | <u>\$Million</u> |                |              |
|---------------------------------|-----------|------------------|----------------|--------------|
|                                 |           | <u>Local</u>     | <u>Foreign</u> | <u>Total</u> |
| Subloans                        |           |                  |                |              |
| Production facilities           |           | 13.3             | 4.7            | 18.0         |
| Farm machinery & equipment      |           | 4.9              | 12.1           | 17.0         |
| Marketing facilities            |           | 4.4              | 3.6            | 8.0          |
| Input supply facilities         |           | 2.0              | 1.0            | 3.0          |
| Agroprocessing facilities       |           | 2.0              | 1.0            | 3.0          |
| Other nonfarm investments       |           | 3.9              | 2.6            | 6.5          |
| <u>Total Financing Required</u> |           | <u>30.5</u>      | <u>25.0</u>    | <u>55.5</u>  |
| <u>Financing Plan:</u>          |           |                  |                |              |
| Bank loan                       |           | -                | 25.0           | 25.0         |
| NACF                            |           | 13.9             | -              | 13.9         |
| Subborrowers                    |           | 16.6             | -              | 16.6         |
| Total                           |           | 30.5             | 25.0           | 55.5         |

| <u>Estimated</u><br><u>Disbursements:</u> | <u>Bank FY</u> | <u>1986</u>         | <u>1987</u> | <u>1988</u> | <u>1989</u> |
|---|----------------|---------------------|-------------|-------------|-------------|
|   |                | <u>US\$ million</u> |             |             |             |
| Annual                                    |                | 8.5                 | 7.5         | 6.5         | 2.5         |
| Cumulative                                |                | 8.5                 | 16.0        | 22.5        | 25.0        |

Map: No. 12351R3

/a Including taxes and duties of \$5.6 million.

## KOREA

### FOURTH AGRICULTURAL CREDIT PROJECT

#### I. BACKGROUND

1.01 The Government of Korea has requested a Bank loan of \$25 million to assist in financing a fourth agricultural credit project through the National Agricultural Cooperative Federation (NACF). The project would support NACF's medium- and long-term lending to farmers and primary cooperatives (PCs) for a wide variety of onfarm and rural income diversification investments. It also includes provisions aimed at improving NACF's profitability and resource mobilization capacity. The project was prepared by NACF taking into account its experience with previous Bank-financed projects and the recommendations made in the Bank's Agricultural Sector Survey (Report No. 4709-KO, April 1984). The Government has requested a loan of \$15 million from the International Fund for Agricultural Development (IFAD); these funds would also be used to support NACF's medium- and long-term lending program, concentrating on beneficiaries who are landless or own less than 1.1 ha of farm land.

#### The Agricultural Sector

1.02 The Republic of Korea has a land area of 98,200 sq km and a population of about 40 million. As most of the country is mountainous, only 22% of the total land area is cultivable. The population density of 400 per sq km and 18.2 per ha of farmland is one of the world's highest. Because of this population pressure, the 2.2 million ha of land available for agriculture is intensively developed and used; about one-fourth of the cultivated land is double-cropped. The available cropland is divided among two million owner-operated smallholdings averaging 1.1 ha in size. Irrigation is available to 70% of the 1.3 million ha of paddy land, about 28% of which has been consolidated from the traditional very small plots into more efficient plots averaging 0.4 ha. Virtually all of the cropland available has good soils, the Korean climate is temperate and average rainfall of about 1,200 mm is adequate for high production of most non-rice crops without irrigation. Crop husbandry is generally excellent with wide use of improved seeds, fertilizers and other chemical inputs. About 80% of the land preparation and crop maintenance operations and 100% of threshing are mechanized. Mechanization of rice transplanting and rice and barley harvesting is only about 15%. Rice and other foodgrains occupy 59% of available cropland with the remainder devoted to vegetables (13%), industrial crops (12%), pulses (9%) and fruits (4%). Agriculture now produces 17% of Korea's GNP, employs 32% of the labor force, and is the main income source for 24% of the population.

1.03 Major trends in the sector include declining rural population; stabilizing staple food grain production and consumption after a sustained period of sharp increases; rapidly increasing production and consumption of horticultural, fish and livestock products; gradually increasing rural under-employment notwithstanding continuing high labor out-migration rates and continued growth in mechanization. There are numerous public and semi-public

institutions serving agriculture and a significant degree of government intervention in the sector. Government activities include controls on land ownership and farm size; direct investments in infrastructure; grants, credit allocations and credit subsidies for private investment; price support and marketing activities by government-controlled cooperatives and parastatal agencies; and a limitation on the import of agricultural products that can be produced domestically.

1.04 For more than a decade the Government's main objectives for the agricultural sector have been national food security, income equity for rural families, price stability, and a high standard of infrastructure and public services in rural areas. The Government has pursued these objectives through policies emphasizing direct government investments and commodity price supports. Korean agriculture has flourished in this supportive and increasingly protective environment. Over the past decade, rapid increases in the use of inputs and farm machinery and improvements in the quality of farm land - through irrigation, drainage and land development - have increased yields and labor productivity. The overall index of agricultural production (1974-76 base) in 1981 was more than twice the 1961 index, with the crops index up about 90% and the livestock products index up 380%. Although the area planted to cereals declined by 425,000 ha (20%) between 1961 and 1981, total cereal production increased from 4.9 to 6.1 million tons, with rice output up 1.6 million tons, more than enough to offset a decline of 450,000 tons in barley and wheat. Production of most other crops also increased significantly with the most dramatic gains in fruits and vegetables, both up almost 600%, and oilseeds, up over 800%. Yields for most crops are high by international standards: rice yields are second only to those of Japan. For crops and livestock products which can be produced domestically, Korea is virtually self-sufficient. However, some 5.9 million tons of grains (mostly wheat, corn and soybeans) and 40,000 tons of beef were imported in 1982. The sector provides consumers with ample supplies of rice and a good selection of other food products.

1.05 Since 1967, rural household income has increased at an annual rate of 6.4% and household consumption at 5.3%. In real terms (1980 prices), per capita income and consumption of rural households have risen even more rapidly, at 7.9% and 6.8% p.a., respectively, reflecting decreasing household size. Data for 1982 and 1983 indicate that effective rural household incomes are now roughly on a par with urban salary and wage earner household incomes. Farm families have income levels about equal to urban workers and can afford the amenities of modern life at levels similar to urban families. For both producers and consumers, seasonal and interyear price fluctuations for agricultural products have been reduced substantially compared to those of the early 1970s. Although there has been a large migration to the two major metropolitan areas in the last two decades, 40% of the Korean population still lives in rural areas and in cities with population of less than 100,000.

#### Sector Issues

1.06 For the future the Government is expected to continue to highlight food security, price stability, and rural income equity as major objectives for agricultural development. However, because of changing conditions in the



general economy and in agriculture, changes will be necessary in the character of the sector and the Government policies affecting it. The present small-farm, labor-intensive agriculture with most rural families relying on farm earnings as their primary income source cannot be sustained if the basic objectives are to be met without incurring large economic costs. The overall set of government policies and programs that were so successful in the past is unlikely to be either feasible or desirable in the future. Development of irrigation and adoption of improved technology over the past 20 years have essentially solved the agriculture supply problem. Of the commodities suitable for domestic production, Korean farmers now produce as much as their markets will absorb. And, given the relatively high average income and consumption levels nationally, overall demand for agricultural products is unlikely to expand much faster than the population growth rate, i.e., about 1.6% p.a. Because Korea has little potential to compete in agricultural export markets, this effectively sets a limit on the rate of growth of the real value of agricultural output and farm incomes that is substantially below the 5-7% p.a. increases expected in manufacturing and other nonagricultural sectors.

1.07 Continuing policies stressing resource development and commodity price supports would almost certainly lead to persistent agricultural surpluses, particularly of rice, that could be disposed of in export markets only at a very substantial loss. Also, because the most attractive and least costly investments have already been undertaken, this strategy would entail more costly and lower return resource development. Furthermore, to achieve the Government's income equality objective, commodity price supports would have to be maintained at levels that probably would lead to increasing government subsidies or high consumer prices for food. In following this path, Korea would join a large number of the more developed nations, including Japan and much of Western Europe, that are saddled with high cost food, food surpluses and sizeable budget outlays to maintain a technologically sophisticated, but economically inefficient agriculture.

1.08 Fortunately, the Government is beginning to consider other policy and investment scenarios that would enable a more efficient development of agriculture, while not losing sight of the high priority objectives. Parity of farm household incomes could be maintained and program costs reduced or eliminated by adopting a market-oriented agricultural strategy and progressively reducing government intervention, especially dismantling of the strict import controls now in effect. A shift in the composition of investments from land and water development to areas such as farm mechanization, agricultural research, agroprocessing and marketing channel development, would reduce production and marketing costs. This strategy would lead to a more efficient agriculture, lower food prices for consumers, and lower subsidy costs to the Government. Because of the relatively low real costs of agricultural land and labor and the possibilities for productivity gains, no serious reduction in the level of agricultural production is likely to occur. Clearly, sensitive issues and uncertainties are involved, which argue for a measured, step by step approach. In particular, the possibility of a more efficient agriculture is closely related to what happens in nonagricultural sectors since this will determine the rate at which workers can transfer out of agriculture. Similarly, the success with which a spatially diversified economic strategy is

pursued depends heavily on the effectiveness of efforts to promote and stimulate strong growth in nonfarm rural or small-town employment.

### The Government's Strategy

1.09 The current prosperity of agriculture and the resurgence in manufacturing and other nonagricultural sectors give the Government a unique opportunity to make policy changes that would allow Korea to escape the agricultural subsidy and surplus problems afflicting many countries. The first step in changing policy directions was taken by revising the Fifth Five-Year Plan (1982-86) in mid-term. The original Fifth Five-Year Plan outlined a continuation of the high investment, high price and high government intervention policies that worked well in the 1970s. However, even before publication of the Plan in late 1981, some rethinking of this approach had begun, which led to plans for a phased elimination of deficits in the grain and fertilizer price support schemes and reconsiderations of numerous other elements of agricultural policy. Agreements with the Bank on the phasing out of grain and fertilizer supports were incorporated in the Structural Adjustment Loan (2071-KO) of 1981. Similarly, in other sectors, the economic difficulties of 1979-81 led to a general reduction in the Government's investment budget and, a subsequent revision of the Fifth Plan. The revised Plan, completed in February 1984, reduces the planned agricultural investment for 1984-86 by about 10%, with essentially all of the cuts in the land and water development programs, and also calls for a 60% reduction in the projected irrigation investments for 1986-91.

1.10 The second step aims at improving sector efficiency while maintaining rural income and population dispersion objectives by promoting the creation of more nonfarm jobs in or near rural areas. The basic framework for expanding rural nonfarm job creation is contained in the "Law for Acceleration of Rural Income Source Development," approved by the National Assembly in 1983. This legislation is intended to accelerate development of rural income sources by drawing manufacturing and service firms into rural areas and, thereby, increasing and upgrading the structure of rural incomes. The Law requires the Government to formulate an official rural development strategy that would be coordinated by the Minister of the Economic Planning Board (EPB) and to establish standing oversight committees for rural income development at the local, provincial and central government levels. Its specific provisions authorize simplification and decentralization of investment approval, tax incentives, and priority in obtaining services and government procurement contracts for industrial plants that locate in non-metropolitan areas. Other actions planned by the government to stimulate employment in rural areas include construction of small rural industrial estates and of buildings for sale or lease to private firms, designation of and financial assistance for development of tourism zones, and improvement of rural roads and transportation services. The revised Fifth Five-Year Plan, together with the law for Acceleration of Rural Income Source Development, reflects an agricultural policy aimed at improving sectoral efficiency, reducing support costs borne by consumers and the Government, and raising rural employment and income. Other policy directions under consideration, which relate to trade liberalization and expansion of farm size, are described below.

1.11 Price and Trade Policies. In the past, agricultural trade restrictions and internal price policies have been major factors supporting the relatively high farm incomes which, in turn, have enabled rapid improvements in the quality of rural life, high on-farm investment, and efficient functioning of the rural credit system. The beneficial impacts of these policies in terms of equity, social stability and broad-based growth have more than offset their economic cost. However, because of increasing resource costs and domestic market saturation for most agricultural products, a continuation of the present trade and price policies is likely to become progressively less effective and more costly. Therefore, the Government plans to reduce agricultural commodity import restrictions and direct government price and marketing interventions. These changes would be made selectively and slowly, but with a target for competitive price levels and substantial reliance on market price mechanisms by 2000. This would give consumers the benefit of much lower food prices, an important element in keeping Korean labor costs competitive. Larger farms, higher productivity and a smaller population dependent on agriculture for income would compensate producers for the lower unit prices that would accompany agricultural liberalization. The Government has already taken some steps that will contribute to the longer term liberalization objective. They have stabilized government purchase prices for rice and barley over the past two years and begun to reduce the Fertilizer Fund deficits by phasing out high-cost excess capacity in the fertilizer industry.

1.12 Expansion of Farm Size. Current land law prohibits ownership of more than 3 ha of farmland by any individual, ownership of farmland by non-farmers, and farmland leasing. This law is generally effective and has made an important contribution to equalizing and improving incomes of rural families with consequent beneficial effects on national well-being. However, the structure of small owner-operator farms thus created is becoming less efficient and less necessary with modernization and expansion of the national economy. Efficient use of labor-saving machinery and, in the long run, maintenance of acceptable levels of farm family incomes will be increasingly constrained by these legal limits. Therefore, long-term evolution of an efficient agricultural sector that will provide good incomes for farmers requires some revision of these laws. Also, because the price of farm land has risen above farmers' ability to finance land purchases, there is no effective market in farm land; so some assistance by the Government is likely to be needed to effect the necessary land consolidation. Although the 3 ha legal limit on farm size will have to be raised eventually, for the medium term the Government's strategy is to encourage consolidation of the current very small farms into larger units within the existing limit. Future actions include a comprehensive survey of farmland ownership, control, and uses to more precisely define problems and needed adjustments in existing land law and formulation of a plan to improve the land-holding system.

#### The Bank's Role and Project Rationale

1.13 Previous Bank Group assistance to Korea's agriculture has been in support of specific projects through 17 loans/credits totalling \$755 million. Of this amount, 70% has been for irrigation and rural development; 15% for storage, processing and marketing facilities; 11% for farm credit; 3% for livestock development; and 1% for seed improvement. The level of external

assistance for Korean agriculture in the future is likely to be much less than previously required to help finance the major irrigation and land development projects which are now largely complete. Therefore, the priority for external assistance over the next few years would appear to be in the areas of farm credit, marketing and related services, and agricultural research. Closely related is the need to improve rural roads and build up secondary cities. In each of these areas, expanded government efforts are planned and continued Bank support would strengthen the Government's program. Participation in this investment program would also give the Bank an opportunity to help identify programs and policy options and to support institutional development for agriculture.

1.14 The Government is considering a number of long-term policy directions which would enable development of a more efficient agricultural sector while still retaining its overall objectives of food security, income equity, price stability and population dispersion. Many of these policy directions are consistent with the findings of the Bank's Agricultural Sector Survey, which generally recommended that Government should stimulate nonfarm employment in rural areas, reduce its overall intervention in the sector, and adopt a broader and longer-term view of agricultural problems. The proposed project would focus on agricultural credit and hence would promote agricultural development through financing private sector investments covering a wide range of agricultural production and rural income diversification activities. It would also address the institutional development issues of NACF, the main credit institution serving agriculture.

## II. THE NATIONAL AGRICULTURAL COOPERATIVE FEDERATION AND THE MEMBER COOPERATIVES

### Institutional Aspects

2.01 Objectives and Functions. NACF was created by the Agricultural Cooperative Law of 1961 as the apex body of the agricultural cooperative system in Korea.<sup>1/</sup> Objectives of NACF and its member cooperatives are to increase agricultural productivity, improve the social and economic status of member farmers, and assist in balanced development of the national economy. Through a network of NACF branch offices and member cooperatives, the NACF system carries out a wide range of activities: extension of agricultural credit; mobilization of funds through banking activities; distribution of agricultural inputs and farm machinery; provision of processing and marketing

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<sup>1/</sup> Korea's cooperative system also includes the National Federation of Fisheries Cooperatives (NFFC) and the National Livestock Cooperative Federation (NLCF). NFFC, comprising 71 member cooperatives and 1,440 fishing village societies, was set up in 1962 to serve as a banking institution for fishermen and fishery-related manufacturers. NLCF was established in 1981 by the merger of the Livestock Industry Development Corporation and the 121 special purpose livestock cooperatives, which had earlier been affiliated with NACF.

facilities and services: and life and property insurance coverage for members. The system serves over 90% of farm households in the country. It accounts for over 95% of the institutional credit supplied to the agriculture sector, meeting about half of the credit needs of farmers; the other half being met from informal sources. NACF's system also is the dominant supplier of farm inputs, supplying over 75% of agrochemicals, machinery and equipment and 100% of fertilizers. It is also a major purchaser of output as well, handling about one-fourth of the total marketed agricultural commodities. The Government provides about one-third of the system's resources and exercises ultimate control over its operations, management and policies.

2.02 Because of its size, scope of activities, and responsibility to implement government agricultural programs, the NACF cooperative system plays a dominant role in the agricultural sector. In keeping with basic cooperative principles, NACF and the cooperatives place great emphasis on services to their clients and undertake several non-income earning activities such as member guidance and training programs (extension services) and administration of government agricultural programs. However, they aim at covering the overall cost of operations through profits on banking and insurance activities supplemented by government subsidies to help support programs that do not cover their own costs.

2.03 Organization and Management. The agricultural cooperative system comprises NACF and 1,512 primary cooperatives (PCs), of which 42 are special purpose horticultural marketing and supply cooperatives. NACF itself comprises a head office in Seoul, nine provincial offices, four city offices, and 139 branches (Chart 26546). The 1,470 general purpose agricultural cooperatives, the PCs, are spread all over the country and have a total of about two million members. The 42 horticultural cooperatives have about 40,000 members, many of whom also belong to PCs. They are organized on the basis of crop items they handle whereas the PCs are organized by geographical jurisdiction. The Agricultural Cooperative Law provides the rules for the PCs' registration, membership, organization, management, accounting, audit, supervision and related matters. However, each PC as well as NACF, operates under its own bylaws and maintains a separate organizational, managerial, and financial identity.

2.04 NACF is wholly autonomous in its day-to-day operations and management. However, it is subject to general policy directives of the MAF. Its operational policies and procedures are formulated by a Steering Committee consisting of representatives from Ministry of Agriculture and Fisheries (MOF), Ministry of Finance (MOF), and Bank of Korea (BOK), and five cooperative delegates appointed by the General Assembly of the Cooperatives. The President, appointed by the President of Korea, is assisted by two senior Vice Presidents and six Vice Presidents. In general NACF's organizational structure is along functional lines. It has 17 management and operations departments, four offices for special functions, a cooperative junior college, a training institute and three commercial centers (see Chart 26546). Each PC functions under the direction of a board of directors elected every three years by members. The members also elect two candidates for the post of President; the final appointment is made by NACF. Each PC employs a full-time paid manager, appointed by NACF.

2.05 Staffing and Training. At all levels of its structure, NACF has a total staff of about 11,000 and the PCs have a total staff of about 30,000 (an average of about 20 staff members per cooperative). With this total staff level, the NACF cooperative system is second only to the Government itself in terms of employee numbers. Staff quality is good: about half of the NACF staff are university educated. Turnover is low, about 10% p.a., but is growing due to rapidly increasing wage rates in the private sector in recent years. Recruitment of new staff members is mostly at junior and middle management levels. NACF's recruitment is centrally organized. Each PC recruits its own employees under supervision by NACF's branch offices, through written tests and interviews. Senior level appointments in NACF and the PCs are generally made through internal selection.

2.06 NACF has a sizeable training program for its own and the cooperatives' employees, and for member farmers. Its training facilities consist of a Central Training Institute, eight Provincial Training Institutes and an Agricultural Cooperative Junior College. Two of the eight provincial institutes are reserved for training of member farmers while the rest are used for training NACF and cooperative staff. In 1985, about 14,000 employees will be trained at these facilities. Training courses cover accounting, banking, cooperative insurance, loan supervision, marketing, cooperative law, management skills, cooperative principles, leadership, human relations and economic development. About 70% of the training courses are business oriented while the balance cover general community development topics. The training programs cover all levels of staff, including middle management of NACF. In addition to its internal training program, NACF will send about 850 staff members to other training facilities (including business management schools) in the country and about 150 for overseas training. During the period 1985-87, NACF expects to provide from its own funds about W 1.6 billion (\$2.0 million) for staff training.

2.07 NACF and the PCs attach considerable importance to provision of training and guidance to their members to help improve their incomes and living standards. Their programs focus on agricultural management as distinct from production technology which is covered by the extension services provided by MAF through the Office of Rural Development (ORD). The training facilities of NACF are used to train farm community leaders and extension staff of the PCs. PC staff in turn organize training camps of 60-100 farmers for a week. In this manner up to half a million member farmers are reached by the training and guidance program every year.

2.08 Management Information System (MIS). NACF is presently engaged in a major effort to computerize its accounting and financial planning systems and put in place a comprehensive management information system. The work on this project was started in 1981 and is expected to be complete by end-1989. By June 1984, all branch offices of NACF were equipped with on-line terminal stations linked to the main computer in the head office. At present these terminals are being used to provide accounting information on deposits, and receivable and payables of the chainstores engaged in general business activities. During the period 1985-87, NACF plans to computerize the information on loans, remittances, insurance, inventories, balance sheets and income statements, budgeting and financial planning. A management information and a

forecasting system will also be put in place. NACF's management is committed to implementing this system and plans to spend about \$10 million over the 1985-87 period. Most of the program and design work is being done by NACF staff: 150 persons including about 100 programmers and system analysts are engaged in this effort. The MIS is designed to remedy most of the shortcomings of the present information system identified by the Bank during appraisal of the Third Agricultural Credit Project.

### Lending Operations and Procedures

2.09 Operations. Cooperatives provide most of the institutional credit for agriculture and related activities to member farmers, mainly from the resources provided by the Government, BOK, NACF and deposits. The funds from sources other than PCs' deposits are channeled through the branch offices of NACF. Additionally, for some special programs, NACF offices extend medium- and long-term credit directly to farmers, instead of through PCs. In the case of funds obtained through foreign currency borrowing, such as Bank loans, credit is handled by the NACF branches and selected PCs. Short-term commercial loans to NACF depositors are made from its deposit resources. The volume of NACF's total loans outstanding (excluding loans to government) increased at an average annual rate of 20% over the period 1979-1983. At the end of 1983 about two-thirds of the amount of the NACF loans outstanding, US\$3.0 billion, had a maturity of over three years (medium and long-term loans) while the remaining one-third had maturity of less than three years (short-term loans according to classification system used by NACF). All of the PCs' loans, US\$1.7 billion, from their own mutual deposit funds were short-term. About 70% of all loans outstanding at end-1983 were for agricultural purposes, whereas 30% were for commercial, rural housing and other purposes. There was no significant change in this distribution over the period 1979-83. The main uses of agricultural loans were: mechanization, production, irrigation facilities and improvement of cooperatives.

2.10 During the period 1979-83, the amount of loans outstanding in arrears averaged less than 1% of total amount of loans outstanding. Most of the arrears are less than one year old and the proportion of arrears of over one year in total arrears declined from 31% in 1979 to 20% in 1983. The arrears of over one year are fully covered by provision for doubtful debts; the quality of NACF's loan portfolio, excluding loans to the Government (para. 2.17), is excellent.

2.11 Procedures. NACF and the PCs follow significantly different loan processing procedures for similar types of loans depending on the source of funding. For projects funded out of their own resources (deposits) and Bank resources, NACF and the PCs carry out a thorough appraisal. For projects funded out of government resources, the appraisals undertaken are less thorough and in some cases appraisal and selection of borrowers is done by local or central government officials. Overall, like the rest of the financial sector, the cooperative system operates within a framework of government directions that shape its lending operations. NACF's annual business program requires prior approval of MAF and MOF. Within the overall guidelines for domestic credit regulation, MAF and MOF determine the level of resources that NACF can obtain from BOK and the Government. They then allocate credit to

specific subsectors and activities in accordance with government priorities. The Government also determines the interest rates applicable to different types of loans as well as deposits. Interest rates on most outstanding loans have been set at 10%, although some were increased to 11.5% after November 1984 when the government raised the ceiling on interest rates. Exceptions were Loans to Young Farmers (5%), Irrigation loans (5.5%), and Bank-financed subloans (12%). Repayment ranges from three to 20 years, with grace periods up to five years. The loans from government resources are mostly for medium- and long-terms and account for about half of the loans made by the cooperative system. As a government agent, NACF maintains several distinct medium- and long-term credit accounts each having its own resources, loan conditions and appraisal procedures, all of which are subject to large year-to-year variability as the emphasis of government policy shifts. The government plans to consolidate and reduce the number of special funds, and in parallel NACF would move towards applying uniform standards in lending procedures (Annex 1).

#### Other Operations

2.12 Banking. NACF and the general purpose primary cooperatives provide complete banking services to member farmers as well as non-members. They accept demand, time and installment deposits, extend loans from banking resources for general and commercial purposes including agriculture, handle remittances and credit guarantee schemes. NACF's International Banking Department is authorized as a Class A foreign exchange bank and helps to meet the demand for foreign exchange required by exporters, importers and overseas travellers. The services include L/C opening, negotiation of export bills, preshipment financing, foreign remittances, issuance of travellers' checks and purchase and sale of foreign currency.

2.13 Marketing. NACF and the PCs handle marketing of farm products for member farmers through collection points and 19 marketing centers operated by NACF. They purchase and resell major inputs and machinery to farmers and provide mechanization services. They also serve as the purchasing agent for the government's various agricultural price stabilization programs and store, sell and distribute government-owned foodgrains. The PCs operate warehouses and mills and provide trucking services for member farmers. NACF carries out foreign trade with emphasis on export of surplus agricultural commodities and timely import of agricultural production materials. NACF operates market information centers in the major cities to provide producers daily auction prices and marketing situation information.

2.14 Cooperative Insurance. NACF provides life and property insurance to cooperative members through its nationwide network of branch offices and the PCs.

#### Financial Condition and Performance

2.15 Financial Condition. NACF assets grew at an average annual rate of 25% over the period 1979-83 and amounted to W 5,069 billion (\$6.3 billion) as of December 31, 1983 (Annex 1, Table 1). The growth of assets was helped by the merger of county/city cooperatives with NACF in 1981 which boosted the loan portfolio. Asset growth was highest in the insurance business, followed



by banking and general business. Equity (paid-in capital, reserves and retained earnings) increased by 236% over the period 1979-82 as a result of retained earnings and a re-evaluation of fixed assets in accordance with the Assets Re-evaluation Act.

2.16 Financial Performance. In 1982 and 1983, NACF incurred sizeable losses amounting to W 55 billion (\$68.9 million) and W 10.7 billion (\$13.4 million) as against profits ranging between W 12 billion to W 22 billion (\$15 to \$27 million) during 1979-81. The recent losses were mainly due to the government decision in 1982 to reduce interest rates on loans and deposits in all banks including the cooperative system. While the reduced rates were to apply to all outstanding loans, only new deposits were to carry the reduced rates. Consequently, income from loans was significantly reduced while the cost of deposits remained substantially unchanged, thus causing a negative spread on lending. Losses on banking activities due to the 1982 changes in interest rate policies will, however, be reduced as earlier, more costly deposits mature and are replaced by new deposits carrying lower interest rates. In fact the average interest paid on deposits declined from 10.4% in 1982 to 6.8% in 1983 (Annex 1, Table 6). The average rate of return on loan portfolio in 1983 was 9.15%, yielding a spread of 2.35%. Though the spread was still insufficient to cover the average administrative cost of 3%, the operating losses on banking operations were lower in 1983 than in 1982.<sup>2/</sup>

2.17 Another important reason for the 1982 and 1983 losses and generally low rate of profitability during the earlier years, has been that NACF was required to cover the losses in its nonbanking activities, undertaken on behalf of the government, from its profits on banking activities. The government uses NACF and cooperatives as service agencies mainly for distribution of fertilizers and other inputs and its price stabilization operations. The commission paid by the Government for the services performed by the cooperative system has on an average covered only about two-thirds of the cost of performing these services (Annex 1, Table 5). In addition, the spread allowed by the Government on its funds channelled to farmers through NACF and cooperatives for sponsored programs ranges from 0.5% to 2.5% and is frequently insufficient to cover lending costs. The government has justified this practice, as well as the underpayment of commission, on the grounds that it creates indirect benefits to farmers by lower costs of credit services and inputs. These arguments have some validity. However, it will not be feasible to continue this practice since the increased competition in the banking industry following the continuing financial sector reforms will narrow down margins and may not provide banking income sufficient to cover losses on general activities. Also, it is not advisable to continue this cross-subsidization since it hides the true costs of nonbanking activities and thereby perpetuates financially and economically inefficient programs and limits NACF's capabilities to carry out institutional development needed for effectively competing with the rest of the banking system in its urban and semi-urban operations.

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<sup>2/</sup> NACF's unaudited income statement for 1984 shows a net profit of W 3.8 billion (US\$4.8 million).

2.18 The budgetary implications of immediately increasing the commission rates and interest rate spreads on government sponsored lending will be substantial. A solution to this problem will be reflected in the proposed reform of NACF which, though expected to be slow and gradual, will effectively address the problem of NACF's low profitability (paras. 3.04-3.06).

2.19 Performance of the PCs. The combined total assets of about 1,470 PCs grew at an average annual rate of 24% over the 1980-83 period (Annex 1, Tables 7 and 8). The growth in banking assets averaged 26% per annum while other business assets grew by 16%. The PCs were able to absorb the effect of interest rate changes of 1982 due to the short-term nature of their deposits and relatively greater flexibility in interest rates charged on loans out of their deposits, and realized modest profits. The equity position of PCs improved at a rate of 13% per annum over the 1980-83 period and the net profits as percentage of average total assets ranged from 0.6 to 0.8% during this period. The condition of individual PCs varies but in the aggregate the financial condition, as well as the financial performance of the primary agricultural cooperatives system is satisfactory. Their performance is helped by the fact that NACF bears the brunt of the negative effects of government interventions and tries to protect the PCs as far as possible.

#### Sources and Uses of Funds

2.20 Resource Mobilization. On December 31, 1983 the total resources mobilized by NACF (excluding equity) amounted to W 3,993 billion (\$5 billion) of which 57% were from deposits and 43% from borrowings. Almost all of the resources were domestic; foreign currency deposits and borrowings accounted for only 3% of total resources. During 1979-81, both deposits and borrowings increased at an average annual rate of about 33%. However, during 1982-83, deposits grew at only 10% per annum while borrowings grew at 20% per annum; the slower growth reflected the tightened liquidity in the economy and a decline in the competitive position of NACF relative to commercial banks due to its inability to offer comparable services. Further, since NACF's deposit resources are largely used for rural lending and government business, funds available for urban lending are limited. This, in turn, restricts client and deposit mobilization in urban areas. NACF's management is giving serious attention to the issue of competitiveness with other banks and will establish a Task Force to analyze the situation and make recommendations.

2.21 Resource Allocation. As noted earlier, the Government plays the leading role in allocation of NACF resources (para. 2.04), thus determining both the economic impact and income from the loan portfolio. A reduction of the Government's role in credit allocation is envisaged, and with greater flexibility in this area, NACF should be able to mobilize increased resources and improve returns on the loan portfolio. However, in recent years, the Government has increasingly used NACF's commercial funds for financing government activities, especially fertilizer and chemicals distribution and grain purchases. Payments due from the Government grew from 9% of NACF's total assets in 1979 to 23%, W 1,192 billion (\$1.5 billion), in 1983 (Annex 1, Table 1) and in the process, lending to member farmers had to be curtailed. Both NACF and the Government are aware of this problem and a solution is to be included under the planned reforms (paras. 3.04-3.06).

2.22 Resource Projections. Historically, the volume of NACF lending has been limited by the availability of funds rather than by loan demand. Nevertheless, NACF's projections of resource requirements and availability are made under the assumptions that current patterns of loan demand, farm households borrowings, deposit mobilization, and availability of government funds would continue. On this basis, NACF estimates that the gap between resource requirements and availability for its medium-term lending program will be about W 119 billion (\$150 million). The proposed Bank loan of \$25 million plus the expected IFAD loan of \$15 million would account for about 25% of this resource gap.

#### Previous Bank-Financed Projects

2.23 Since 1972, NACF has received three loans from the Bank for agricultural credit projects. The first and the second projects were both closed within the original closing dates. The third loan (Ln. 1984-KO) was fully disbursed and closed almost a year ahead of the expected Closing Date of December 31, 1985. Utilization of Bank resources under all the three projects has been satisfactory from financial, institutional and developmental viewpoints. The Project Performance Audit Reports (PPAR) estimated ERRs for the first and second projects at 38% and 23%, respectively.<sup>3/</sup> The PPARs attributed the overall successful implementation of the projects to the facts that NACF is a large, long established, cooperative credit institution, an effective Technical Unit (TU) was developed in NACF, and Loan Appraisal Officers (LAOs) were well trained in project lending. The TU and LAO skills have continued to improve under the third project and project implementation has been excellent.

2.24 All three projects provided medium- and long-term loans to support investments for diversification and modernization of agricultural production. Typical investments included orchards, greenhouses, sericulture, sprinkler irrigation, on-farm storage, and poultry and pig production. The actual investments financed evolved from the farmers' demand. The PPARs found that the actual distribution of project investments differed significantly from the appraisal predictions, primarily caused by changing product prices, technological and institutional factors, and government policy. Nevertheless, the projects fulfilled their primary goals of diversification of agriculture and increased incomes and outputs.

#### NACF's Medium-term Development Strategy

2.25 In the next few years, NACF will be facing a significantly changed environment in both its banking and general business activities. In the banking field, the financial sector reforms being implemented by the Government under the Bank-financed Industrial Finance Project (Ln. 2309-KO) are expected to liberalize the financial system by allowing market forces to play a greater role in determining interest rates and by deregulating the activities of the

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<sup>3/</sup> Appraisal estimates were 32% for the first project (Cr. 335-KO) and 29-38% for the second project (Ln. 1328-KO).

various classes of financial institutions so that they can compete more freely. NACF will need to maintain a competitive position in the financial system, particularly on the resource mobilization side, and to offer services and financial instruments aimed at mobilizing long-term deposits. The medium-term institutional development plans enunciated by NACF (Annex 1) recognize the changing business environment and aim at taking the necessary actions to enable it to adapt to the changes. Main elements of this plan would: (a) improve the efficiency of banking operations so as to increase resource self-sufficiency and maintain competitiveness with other financial institutions; (b) diversify business activities and increase the cooperatives' share in the marketing of agricultural inputs, output and services, and in the domestic insurance market; (c) strengthen education and training for cooperative staff and member farmers; and (d) strengthen NACF's financial condition and improve organizational efficiency and productivity.

### III. THE PROJECT

#### Project Objectives and Description

3.01 The proposed project would focus on agricultural credit and hence would promote agricultural development through financing private sector investments covering a wide range of agricultural production and rural income diversification activities. It would also address the institutional development issues facing NACF, the main credit institution serving agriculture.

3.02 The project would have the following components:

- (a) subloans for investment in agricultural production facilities, farm machinery and equipment, marketing and storage facilities, input manufacturing and supply, agroprocessing facilities, and other rural business opportunities to expand off-farm income sources; and
- (b) measures to improve NACF's profitability and resource mobilization.

#### Detailed Features

3.03 NACF Subloans. The project would finance NACF subloans to farmers and primary cooperatives for the types of investments supported under the three previous Bank-assisted agricultural credit projects (Cr. 335-KO, Ln. 1328-KO, Ln. 1974-KO). These include on-farm storage, orchard development, greenhouses, sericulture, farm machinery, small farm input and agroprocessing facilities, warehouses and marketing facilities. It would also finance business investments to diversify rural income sources that were not included in the previous projects. These would include handicrafts, weaving, machinery repair shops, inland fisheries, tourism facilities and wood and metalwork shops. About 30% of the subloan volume under the project would be for nonfarm investment purposes, including development of cooperative marketing-channel facilities. Most of the subloans would be directly to farmers or small rural businesses but some would be to the primary cooperatives for investments to benefit their members. Project subloans, expected to number about 8,500, would go to rural borrowers throughout the country. Because of the emerging market saturation in Korea for some agricultural

products and uncertainties about the viability of nonfarm activities, NACF would carefully assess market prospects annually and select the activities to be financed during each year.

3.04 Improvement of NACF's profitability and resource mobilization. The program of financial reforms being applied to the banking industry in connection with the Industrial Finance Project (Ln. 2309-K0) should be extended to the agricultural credit system. This program includes provisions to (a) reduce the role of Government in credit allocation, (b) deregulate the activities of financial institutions, (c) liberalize interest rates in a gradual manner to increase the role of market forces, and (d) alleviate the potentially negative impact on bank profitability of the present system of variable lending rates combined with fixed-rate deposit contracts. An understanding was reached during negotiations that Government would apply the relevant financial sector reforms to agricultural credit provided by NACF.

3.05 In addition, the Government would, by December 31, 1986, in consultation with NACF, complete a comprehensive review of NACF's financial condition and propose measures, acceptable to the Bank, to improve the profitability and resource mobilization of NACF. Thereafter, Government would take the necessary steps to enable NACF to begin implementation of these measures. An agreement to this effect was reached during negotiations. Issues to be considered in the review would be retention of banking profits for use in expanding services, adjustment of charges for nonbanking services to reflect their full cost, provision of a wider range of services, and the costs of administering loans financed from various official programs, together with ways of recovering those costs. The review would also include an examination of ways for NACF to generate longer-term funds.

3.06 For the short term, special measures are necessary in 1985 and 1986 to strengthen NACF's financial condition pending the longer-term solution. An understanding was reached during negotiations on near-term measures that the Government would implement to improve NACF's financial condition. These measures include payment of commission at the same rate as in 1983 or higher for handling of grains on behalf of the Government, the transfer of selected fertilizer and agrochemical distribution programs to NACF, and the continuation of buying and selling price adjustments for Government grains and fertilizers.

#### Costs, Financing and Relending Terms

3.07 Cost Estimates. Total project costs are estimated at W 44,400 million (\$55.5 million) of which W 20,100 million (\$25 million) or 44% is foreign exchange cost (Table 3.1). Project costs were estimated by applying July 1984 prices to standard models of the various plant, equipment and technical items proposed for financing by NACF. The foreign exchange estimates are based on results of a 1982 Korea Development Bank analysis of the foreign and local cost composition for construction and equipment items. The overall cost estimate includes taxes and duties of about W 4.5 billion (\$5.6 million) or 10%. No allowance was made for contingencies as it is expected that any cost changes would lead to an adjustment in the number of subloans. The subsectoral distribution of loans shown in the cost summary is intended only as a

guideline. This guideline would be reviewed annually in the light of disbursement experience and adjustments made as appropriate to insure that the subsectoral distribution of onlending is consistent with the market demand for credit.

Table 3.1: COST SUMMARY

|                            | Local<br>— ( W billion) | Foreign     | Total       | Local<br>— (US\$ million) | Foreign     | Total       | %<br>Foreign |
|----------------------------|-------------------------|-------------|-------------|---------------------------|-------------|-------------|--------------|
| Subloans                   |                         |             |             |                           |             |             |              |
| Production facilities      | 10.6                    | 3.8         | 14.4        | 13.3                      | 4.7         | 18.0        | 26           |
| Farm machinery & equipment | 3.9                     | 9.7         | 13.6        | 4.9                       | 12.1        | 17.0        | 71           |
| Marketing facilities       | 3.5                     | 2.9         | 6.4         | 4.4                       | 3.6         | 8.0         | 45           |
| Input supply facilities    | 1.6                     | 0.8         | 2.4         | 2.0                       | 1.0         | 3.0         | 35           |
| Agroprocessing facilities  | 1.6                     | 0.8         | 2.4         | 2.0                       | 1.0         | 3.0         | 35           |
| Other nonfarm investments  | 3.1                     | 2.1         | 5.2         | 3.9                       | 2.6         | 6.5         | 40           |
| <u>Total</u>               | <u>24.3</u>             | <u>20.1</u> | <u>44.4</u> | <u>30.5</u>               | <u>25.0</u> | <u>55.5</u> | <u>45</u>    |

3.08 Financing. The financing plan provides for a Bank loan of \$25 million, amounting to 45% of project costs or 100% of foreign exchange costs. NACF would finance \$13.9 million, or 25% of the total. Subborrowers would contribute the remaining \$16.6 million, which amounts to 30% of the total costs.

3.09 Onlending Terms. The Bank loan of \$25 million equivalent would be made to the Government at the Bank's standard variable interest rate. The Government would onlend the funds to NACF, which together with a further \$13.9 million equivalent from NACF's own resources, would fund their \$38.9 million credit program. The Government's loan to NACF would be on the same terms but may include an administrative fee of 0.05%. Since NACF subloans are, for the most part, directed to small farmers, NACF would bear the foreign exchange risk. An understanding was reached at negotiations that the Government would furnish financial assistance to NACF to help protect it against this risk. The signature of a subsidiary loan agreement, between the Government and NACF, with terms and conditions acceptable to the Bank, would be a condition of effectiveness of the proposed loan.

3.10 NACF's subborrowers would pay interest sufficient to maintain a spread of 3% over the weighted average cost of project loan funds. With the interest on the Bank loan at about 9% and NACF's other resources from 8-10%, the cost of project funds would be about 9%. On the basis of experience gained with previous projects, the 3% spread is adequate to cover the costs involved. Given an expected rate of domestic inflation of no more than 8-9% during the 1985-88 period, the proposed 12% on-lending rate is positive in real terms. As part of the financial sector reforms presently underway, the

Government will gradually allow market forces to determine the level and structure of interest rates, currently set at 10%-11.5% for all borrowing. These rates are expected to move in line with international interest rates adjusted for foreign exchange risk, and thus the lending rates for Bank funds are not expected to cause any longstanding misalignment with domestic market rates. An assurance was obtained during negotiations that NACF would maintain a spread of 3% over the weighted average cost of project subloan funds and would pass on to subborrowers any significant variation in the interest rate on the Bank loan.

### Procurement

3.11 Procurement procedures and arrangements of NACF are in line with those of other financial institutions in Korea and are satisfactory to the Bank. The procedures are designed to ensure that procurement is performed with due regard for economy and efficiency. Borrowers are required to procure through local competitive bidding or local shopping using the three-bid method, depending on the type of items and the amounts involved. The goods and works financed by subloans are small in value - the average loan size is about \$3,000 - and purchased at various times by thousands of farmers and other rural borrowers throughout Korea. The well-established local commercial channels and an active competitive construction industry ensure reasonable prices for the subborrowers. The costs and quantities involved in the agro-processing, chilled storage and other equipment purchased by cooperatives are too small to justify international bidding. Foreign equipment suppliers are adequately represented through local agencies and there are many local suppliers of agroprocessing and related equipment, including facilities to service them, and competent civil works contractors. Both foreign and local equipment suppliers provide technical assistance for the proper installation and operation of their equipment, and competition among them is keen. Under the previous projects, procurement by borrowers has been cost effective and efficient. Normally, building construction in previous projects in Korea has involved fairly small contracts, and wide experience with ICB on civil works on other Bank projects has shown that contracts of this size do not attract foreign firms.

### Disbursements

3.12 Subloans by NACF under the project are expected to cover a three-year commitment period commencing in the third quarter of 1985. The proposed Bank loan would be disbursed by December 31, 1988 (Annex 2). The disbursement estimates are based on experience under the previous agricultural credit projects. The Bank would finance 65% of NACF's eligible subloans to farmers, small firms and primary cooperatives. Withdrawal applications for the lending program would be supported by Statements of Expenditures (SOE), accompanied by a list of subloans and certified by the Project Manager. The documentation in support of SOEs would be retained by the agency and would be available to the Bank and the auditors for inspection during the course of supervision and audit inspections. NACF is fully familiar with the use of SOE procedures, and their accounting and internal control procedures are satisfactory to ensure that Bank funds are used for the intended purposes. A Special Account in the amount of \$2.0 million would be established for NACF and would cover all eligible expenditures financed by the Bank.

### Organization and Management

3.13 As in the previous three projects, NACF would be responsible for the overall implementation of the project. NACF's Technical Unit (TU) was created to manage previous Bank-financed projects and is experienced in accounts, disbursements, monitoring and evaluation, and reporting relative to Bank loans. This division would have primary responsibility for project activities and would maintain sufficient staff to ensure satisfactory project implementation. The TU professional staff consists of a manager, who reports to the General Manager of the International Banking Department, four senior and one junior technical staff members. Principal functions of the TU are to: (a) prepare an annual Project Implementation Plan (PIP); (b) supervise and monitor project progress; (c) provide technical advice and training to Loan Appraisal Officers (LAOs); (d) withdraw Bank loan proceeds; (e) prepare quarterly progress reports; (f) liaise with the Bank on all project matters; (g) prepare and update standardized farm models for use in subloan appraisals; and (h) appraise subloans above the free limit of branches/cooperatives. The TU would be assisted by a Project Implementation Committee (PIC) comprising representatives selected from other departments in NACF. The PIC serves to facilitate institution-wide support to and benefits from Bank-financed projects.

3.14 NACF's branch offices would be responsible for lending operations including monitoring, problem-solving and recovery of loans. They operate under close supervision by the TU, within the framework of the annual PIP which specifies the subloan types and target amounts for the operating year. Annual allocations of project funds would be adjusted to reflect projected national or local market conditions and the effects of other development programs. NACF branches make subloans directly to farmers and agribusiness firms or to eligible PCs <sup>4/</sup> for onlending to farmers or for their own investments. In cases where the PCs make subloans to farmers, they receive 50% of the interest spread to cover their expenses. The branches and PCs are allowed to grant subloans to farmers without case-by-case detailed appraisal as long as the proposed investment is similar to representative farm models developed periodically by the TU and the prospective return on investment is at least equal to the interest rate. In the case of substantial variations from the model, a branch or the TU carries out a full appraisal. Collateral and creditworthiness are verified for all applicants. These procedures have been used in previous Bank-financed projects and are acceptable to the Bank.

3.15 Subborrowers would be required to contribute a minimum of 20% of investment cost either in cash or in kind, including the value of family labor. The small-farm borrowers, i.e., those with less than 1 ha of farmland, would contribute 20%; others, 30% or more. Repayment terms for subloans, determined according to projected cash flow estimated in the appropriate model or individual appraisal, are expected to range from three to 11 years,

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<sup>4/</sup> Eligible PCs are defined as those having (a) overdues not exceeding 10% of total outstanding loans during the immediately preceding year, (b) adequate extension services, and (c) an adequate number of LAOs to cope with the appraisal and supervision workload.



including grace periods ranging from one to six years. Rescheduling would be allowed in bona fide hardship cases. Most of the subloans under the project are expected to be below US\$10,000, and would be approved by the NACF branches and PCs without Bank review. However, a few subloans, mainly to PCs for their own investments, may be larger. Keeping such subloans in view, a free limit of US\$500,000 would be maintained. An assurance was obtained during negotiations that all appraisal reports for subloans above the free limit would be sent to the Bank for its prior review and approval.

#### Accounts, Audits and Progress Reports

3.16 Under previous projects, NACF's accounts have been audited by independent auditors acceptable to the Bank. The audits have been satisfactory. This requirement would be maintained under the proposed project. NACF would maintain separate accounts for the project which would be audited annually. Annual audit reports covering total operations and the project accounts together with copies of the audited balance sheets and income statements, would be submitted to the Bank within four months after the close of each financial year. The auditors' reports on project accounts would include (a) a statement on the adequacy of the accounting system and internal controls, and (b) an opinion on the reliability of the statements of expenditures as a basis for loan disbursement. NACF would prepare a six-month progress report covering the implementation of the project. These reports would be submitted to the Bank no later than August 15 and February 15 every year. NACF would prepare a Project Completion Report and submit it to the Bank not later than six months after the loan closing date.

#### Benefits

3.17 The proposed project would focus on agricultural credit and, hence, would promote agricultural development through financing investments covering a wide range of production and marketing activities. It would also include measures to improve NACF's profitability and resource mobilization. Loan demand projections and recent experience suggests that approximately 8,500 NACF subprojects would be financed under the credit component. The subprojects would benefit farmers and other rural or small community residents by enhancing agricultural production efficiency, supporting development of nonfarm income sources for rural families, and contributing to the Government's rural income support and population dispersion objectives. Analysis of the types of investment subprojects proposed for financing indicate financial rates of return in the range of 18-50% and economic rates of return in the range of 17-46%. These estimates are similar to the financial and economic results achieved by subprojects under the previous Bank-assisted projects (para. 2.23).

3.18 The impact of NACF's medium-term institutional development plan, along with the measures to improve profitability and resource mobilization which will be implemented in conjunction with the proposed project, would improve the cooperative system's ability to expand services to its clientele, provide financial strengthening, and enhance its role in rural financial market development (Annex 1).

### Risks

3.19 The main risk associated with the proposed loan is that the investments financed by NACF might lead to overcapacity in particular areas, such as orchards or greenhouses. However, the project provides that the subsectoral distribution of onlending would be reviewed annually and appropriate adjustments made to reflect market conditions.

### IV. AGREEMENTS AND UNDERSTANDINGS REACHED AND RECOMMENDATIONS

4.01 During negotiations, understandings were reached with the Government on the following points:

- (a) it would apply relevant financial sector reforms to agricultural credit provided by NACF (para. 3.04);
- (b) it would implement an agreed package of measures in 1985 and 1986 to strengthen NACF's financial condition pending the comprehensive review and longer-term measures (para. 3.06); and
- (c) it would furnish NACF with financial assistance to help protect it against the foreign exchange risk (para. 3.09).

4.02 During negotiations, agreements were reached with the Government on the following point;

- (a) it would (i) by December 31, 1986, in consultation with NACF, complete a comprehensive review of NACF's financial condition and propose measures, acceptable to the Bank, to improve the financial performance of NACF, and (ii) thereafter, take all necessary steps to enable NACF to begin implementation of these measures (para. 3.05).

4.03 During negotiations, agreements were reached with NACF on the following points:

- (a) it would implement the long-term measures to improve its financial performance (para. 3.05);
- (b) it would maintain an interest rate spread of 3% over the weighted average cost of project subloan funds and would pass on any significant variation in the interest rate on the Bank loan to subborrowers (para. 3.10); and
- (c) all subloans above the free limit of \$500,000 equivalent would be sent to the Bank for its prior review and approval (para. 3.15).

4.04 The following would be a condition of effectiveness:

- (a) the signature of a subsidiary loan agreement between the Government and NACF, under terms and conditions acceptable to the Bank (para 3.09).

4.05 Subject to obtaining the above assurances, the project would be suitable for a loan of \$25 million repayable in 15 years, including three years of grace, at the World Bank standard variable interest rate. The borrower would be the Republic of Korea.

KOREA

FOURTH AGRICULTURAL CREDIT PROJECT

National Agricultural Cooperative Federation (NACF):  
Statement of Medium-Term Development Strategy (1985-91)

1. Within the framework of its fundamental goals of increasing agricultural productivity, improving the social and economic status of member farmers, and contributing to a balanced development of the national economy the specific medium-term objectives of NACF are: (a) improve the efficiency of Banking operations so as to increase self-sufficiency in resources and to remain competitive with other financial institutions; (b) increase the share of the agricultural cooperatives in marketing of agricultural inputs, outputs and services, and diversify other business activities to maximize returns to member farmers; (c) increase the share of cooperative insurance in the domestic insurance market and develop medical and other social insurance schemes for the benefit of members; (d) strengthen the education and training activities aimed at development of member cooperatives and member farmers; and (e) strengthen NACF's financial condition and improve organizational efficiency and productivity.
2. To achieve these objectives, NACF will initiate measures, as necessary, in the specific areas outlined below:

Banking Business

- (a) Strengthen deposit mobilization by developing new types of deposits to increase the volume, particularly of longer-term deposits, with a view to make NACF self-reliant for resources and reduce dependence on government funds for meeting the medium and long-term credit needs of member farmers;
- (b) Enhance its efficiency of resource allocation by (i) carefully evaluating the market prospects for incremental output from investment proposals taking into consideration Korea's international comparative advantage, and (ii) giving priority to development of diverse farming systems, and nonfarm income and employment opportunities;
- (c) During 1985 assemble a task force to assess the competitiveness of NACF and the primary cooperatives (PCs) in the context of the ongoing financial sector reforms. In light of the findings of the task force, initiate steps to strengthen the competitive position of NACF and the PCs in the banking business; and
- (d) Take steps to improve profitability of the banking business covering inter alia reorganization of branches to eliminate loss centers, control of expenses, revision of the branch network after careful assessment of profitability, expansion of profitable banking services and seeking remedial actions to the negative financial consequences of government intervention.

General Business

- (a) Expand cooperative marketing outlets (such as supermarkets, chain stores, distribution centers), transport and storage facilities, and the network of farm machinery service centers and gas stations;
- (b) Invest in agro-processing facilities with a view to achieve vertical integration and maximize value added for the benefit of member-farmers;
- (c) Expand marketing of agricultural outputs and purchase of agricultural inputs and consumer goods; and
- (d) Increase advertising and promotion to develop a strong brand and product image for consumer products of the cooperatives.

Insurance Business

- (a) Develop a variety of insurance activities, such as medical and annuity insurance etc., for the benefit of member farmers, and by aggressive marketing expand the share of NACF and the PCs in the domestic insurance market.

Education and Training

- (a) Strengthen training activities and give high priority to training of senior management and staff in modern business management practices particularly in banking industry, training of trainers, and training in modern banking technology.

Organization

- (a) Accord top priority to increasing the net income of NACF and the Cooperatives, reversing the recent deterioration of financial condition, and rebuilding capital and reserve accounts. To this end take all possible measures to control costs and increase incomes and encourage the Government to alleviate the losses resulting from government-directed activities;
- (b) Complete computerization of the on-line terminal system for the banking business by end 1984, of all lending activities by end 1986, and of all other business activities, as well as a comprehensive management information system by end 1989;
- (c) Review the present organizational structure with a view to reorganizing it to cope with the era of specialization in business activities; and

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- (d) Review the present organization of lending activities by source of funds with a view to integrating them, in parallel with consolidation of special government funds in fewer numbers, and apply uniform standards in lending policies and procedures.

REPUBLIC OF KOREA

FOURTH AGRICULTURAL CREDIT PROJECT

NACP: Audited Balance Sheets, 1979-83  
(Won million)

|   | 1979             | 1980             | 1981             | 1982             | 1983             |
|---|------------------|------------------|------------------|------------------|------------------|
| <b><u>Assets</u></b>  |                  |                  |                  |                  |                  |
| Cash and deposits   | 213,233          | 198,447          | 170,761          | 400,848          | 346,030          |
| Marketable securities, at cost                                | 451,956          | 509,035          | 458,172          | 399,394          | 347,097          |
| Receivables   |                  |                  |                  |                  |                  |
| Loans and overdrafts  | 853,141          | 1,189,499        | 1,833,013        | 1,982,157        | 2,434,293        |
| Trade and other   | 146,853          | 203,259          | 212,241          | 214,063          | 225,371          |
| Subtotal  | <u>999,994</u>   | <u>1,392,758</u> | <u>2,045,254</u> | <u>2,196,220</u> | <u>2,659,664</u> |
| Less: Allowance for doubtful accounts                         | 4,505            | 3,875            | 7,052            | 4,936            | 5,675            |
| Subtotal  | <u>995,489</u>   | <u>1,388,883</u> | <u>2,038,202</u> | <u>2,191,284</u> | <u>2,653,989</u> |
| Inventories, at lower of cost or market                       | 177,716          | 212,040          | 247,291          | 343,461          | 319,440          |
| Due from Government of Korea                                  | 197,912          | 337,688          | 705,042          | 881,552          | 1,192,835        |
| Property and equipment, at cost less accumulated depreciation | 42,647           | 47,959           | 146,842          | 137,990          | 157,318          |
| Other assets  | 12,522           | 17,155           | 38,005           | 42,668           | 52,682           |
| Total Assets  | <u>2,091,475</u> | <u>2,711,207</u> | <u>3,804,315</u> | <u>4,397,197</u> | <u>5,069,391</u> |
| <b><u>Liabilities and Stockholders' Equity</u></b>            |                  |                  |                  |                  |                  |
| Deposits  | 1,022,569        | 1,309,049        | 1,871,080        | 2,175,414        | 2,288,391        |
| Trade payables  | 65,756           | 99,655           | 91,902           | 97,725           | 108,577          |
| Claims and insurance reserves                                 | 125,099          | 164,128          | 205,934          | 233,656          | 306,361          |
| Accrued interest and other liabilities                        | 113,386          | 95,715           | 186,738          | 226,124          | 425,850          |
| Reserve for employees' severance liability                    | 17,022           | 21,410           | 74,308           | 85,957           | 107,718          |
| Borrowers   | 666,055          | 914,264          | 1,182,360        | 1,435,581        | 1,704,613        |
| Stockholders' equity  |                  |                  |                  |                  |                  |
| Common stock  | 12,274           | 16,154           | 27,727           | 28,842           | 29,997           |
| Capital surplus   | 24,886           | 24,886           | 103,689          | 103,718          | 103,725          |
| Reserves  | 2,563            | 3,688            | 64,803           | 75,571           | 53,852           |
| Unappropriated retained earnings or deficit                   | 41,865           | 62,258           | (4,226)          | (65,391)         | (59,693)         |
| Subtotal  | <u>81,588</u>    | <u>106,986</u>   | <u>191,993</u>   | <u>142,740</u>   | <u>127,881</u>   |
| Total Liabilities and Stockholders' Equity                    | <u>2,091,475</u> | <u>2,711,207</u> | <u>3,804,315</u> | <u>4,397,197</u> | <u>5,069,391</u> |

REPUBLIC OF KOREA

FOURTH AGRICULTURAL CREDIT PROJECT

NACF: Audited Income Statements (1979-83)  
(Won million)

| The year ended December 31                                | 1979             | 1980             | 1981             | 1982             | 1983             |
|---|------------------|------------------|------------------|------------------|------------------|
| <u>Revenues</u>   |                  |                  |                  |                  |                  |
| Sales and service fees                                    | 620,526          | 687,883          | 531,786          | 457,114          | 503,446          |
| Subsidized fertilizer sales                               | 246,551          | 353,848          | 557,090          | 435,624          | 474,889          |
| Interest income on loans and deposits                     | 132,313          | 188,674          | 298,057          | 257,793          | 256,061          |
| Interest on marketable securities                         | 78,991           | 92,095           | 107,149          | 89,177           | 57,006           |
| Insurance premiums  | 44,850           | 55,978           | 58,509           | 68,959           | 113,398          |
| Commissions and other                                     | 20,104           | 40,317           | 45,223           | 20,893           | 33,639           |
| Subtotal  | <u>1,143,335</u> | <u>1,418,795</u> | <u>1,597,814</u> | <u>1,329,560</u> | <u>1,438,439</u> |
| <u>Cost and Expenses</u>                                  |                  |                  |                  |                  |                  |
| Cost of sales and service fees                            | 616,620          | 684,598          | 533,456          | 455,962          | 492,564          |
| Cost of subsidized fertilizer sales                       | 242,383          | 321,606          | 497,696          | 374,176          | 409,569          |
| Interest charges and commissions                          | 174,270          | 274,127          | 340,708          | 296,353          | 249,982          |
| Insurance claims, reserves and dividends to policyholders | 56,867           | 74,289           | 101,823          | 113,790          | 139,813          |
| Selling, general and administrative expenses              | 32,051           | 39,865           | 108,723          | 128,376          | 147,054          |
| Provision for doubtful accounts                           | 400              | -                | 3,795            | 520              | 1,015            |
| Subtotal  | <u>1,122,591</u> | <u>1,394,485</u> | <u>1,586,201</u> | <u>1,369,177</u> | <u>1,439,997</u> |
| <u>Operating Profit (Loss)</u>                            | <u>20,744</u>    | <u>24,310</u>    | <u>11,613</u>    | <u>(39,617)</u>  | <u>(1,558)</u>   |
| Other income of loss, net                                 | 2,144            | (1,334)          | 2,192            | (14,659)         | (7,069)          |
| <u>Earnings or Loss Before Income Taxes</u>               | <u>22,888</u>    | <u>22,976</u>    | <u>13,805</u>    | <u>(54,276)</u>  | <u>(8,627)</u>   |
| Income taxes  | 360              | 358              | 863              | 842              | 2,083            |
| <u>Net Earnings (Loss)</u>                                | <u>22,528</u>    | <u>22,618</u>    | <u>12,942</u>    | <u>(55,118)</u>  | <u>(10,710)</u>  |
| Earnings per share  | 23,105           | 17,378           | 4,667            | -                | -                |



REPUBLIC OF KOREA

FOURTH AGRICULTURAL CREDIT PROJECT

NACF: Net Earnings (After Taxes) by NACF Departments  
(Won million)

| Year | General<br>department | Banking<br>department | Insurance<br>department | Total for<br>NACF |
|------|-----------------------|-----------------------|-------------------------|-------------------|
| 1979 | (1,893)               | 14,475                | 9,949                   | 22,531            |
| 1980 | (9,019)               | 16,758                | 14,879                  | 22,618            |
| 1981 | 588                   | 11,801                | 553                     | 12,942            |
| 1982 | (27,674)              | (27,835)              | 391                     | (55,118)          |
| 1983 | (12,075)              | 3,766                 | 2,401                   | (10,710)          |

Source: Annual Audit Reports of NACF for the relevant years.

Note: Individual department data may not add up to total since inter-departmental entries are eliminated when total for NACF is compiled.

REPUBLIC OF KOREA

FOURTH AGRICULTURAL CREDIT PROJECT

NACF and the Primary Cooperatives: Estimate of Losses  
due to Government Policies  
(Won million)

|   | 1981            | 1982          | 1983          |
|---|-----------------|---------------|---------------|
| Net losses resulting from inadequate commission received for nonbanking services.     | 11,259          | 12,150        | 8,672         |
| Net losses resulting from inadequate spread allowed on relending of government funds. | 15,666          | 18,403        | 21,626        |
| Net losses resulting from interest rate policies on deposits and lending              | 27,642          | 57,369        | 13,898        |
| <u>Total Estimated Losses</u>   | <u>54,567</u>   | <u>87,922</u> | <u>44,196</u> |
| <u>Actual Losses (Profit) of NACF</u>   | <u>(12,942)</u> | <u>55,118</u> | <u>10,710</u> |
| Capital and reserves accounts (NACF) /a   | 191,993         | 142,740       | 127,881       |
| % decline from previous year  | -               | 26            | 11            |
| Government dues as % of total assets  | 18.53           | 20.05         | 23.53         |
| Capital, reserves, earnings of Primary Cooperatives                                   | 199,901         | 221,093       | 229,326       |

/a The net worth (equity) declined by 34% during the period 1981-83.

REPUBLIC OF KOREA

FOURTH AGRICULTURAL CREDIT PROJECT

NACF and Primary Cooperatives: Estimate of Losses due to Inadequate  
Commission Paid by the Government on Nonbanking Services /a  
(Won million)

|  | 1981          | 1982          | 1983         |
|--|---------------|---------------|--------------|
| <u>Commission Amount</u>                       |               |               |              |
| A. Requested by the NACF                       | 31,650        | 30,352        | 26,593       |
| B. Agreed by the Government                    | 25,842        | 20,898        | 22,751       |
| C. Actual paid by the Government               | 20,391        | 18,202        | 17,921       |
| D. <u>Losses</u> (A - C)                       | <u>11,259</u> | <u>12,150</u> | <u>8,672</u> |
| <u>Memo Items</u>                              |               |               |              |
| 1. B as % of A                                 | 81            | 69            | 85           |
| 2. C as % of A                                 | 64            | 60            | 67           |
| 3. C as % of B                                 | 79            | 87            | 79           |
| 4. NACF losses (profit) on general business /b | (588)         | 27,674        | 12,075       |

/a The services performed include: (i) sale of agrochemicals, farm machinery and fertilizers; (ii) purchases of barley and rice; (iii) straw processing; and (iv) sale of Government grains and bonds.

/b The general business of NACF comprises many other nonbanking activities besides the Government-behest sale and purchase of agricultural inputs and outputs. Therefore, the Government payment of commission is the major, rather than the sole, determinant of the profitability of general business activities.

REPUBLIC OF KOREA  
FOURTH AGRICULTURAL CREDIT PROJECT

NACF: Indicators of Financial and Operational Performance (1979-83)  
(Won billion)

| Indicators  | 1979       | 1980  | 1981  | 1982  | 1983  |
|---|------------|-------|-------|-------|-------|
| <u>Total Assets</u>                                       | 2,091      | 2,711 | 3,804 | 4,397 | 5,069 |
| of which /a   |            |       |       |       |       |
| - Banking   | 1,842      | 2,380 | 2,904 | 3,379 | 3,840 |
| - Insurance   | 163        | 216   | 266   | 1,318 | 1,445 |
| - General   | 490        | 744   | 1,077 | 304   | 377   |
| <u>Total Loan Portfolio</u>                               | 853        | 1,189 | 1,832 | 1,982 | 2,434 |
| <u>Total Equity</u>                                       | 81         | 107   | 192   | 143   | 128   |
| <u>Total Deposits</u>                                     | 1,022      | 1,309 | 1,871 | 2,175 | 2,288 |
| <u>Total Borrowings</u>                                   | 666        | 914   | 1,182 | 1,435 | 1,704 |
| <u>Percentage of Average Total Assets</u>                 | <u>(%)</u> |       |       |       |       |
| a. Gross income   | 61         | 59    | 49    | 32    | 30    |
| b. Purchases and selling costs                            | 46         | 42    | 31    | 20    | 19    |
| c. Financial expenses                                     | 12         | 14    | 14    | 10    | 8     |
| d. Gross spread (a-(b+c))                                 | 3          | 3     | 4     | 2     | 3     |
| e. Administrative expenses                                | 1.7        | 1.7   | 3.3   | 3.1   | 3.1   |
| f. Net profit   | 1.2        | 1.0   | 0.4   | (1.3) | (0.2) |
| <u>Other Ratios</u>                                       |            |       |       |       |       |
| a. Net profit as % of average equity                      | 50         | 27    | 8     | (33)  | (8)   |
| b. Total debt/equity                                      | 11:1       | 8:1   | 6:1   | 10:1  | 13:1  |
| c. Avg. cost of borrowing                                 | 4.4        | 6.8   | 7.0   | 6.8   | 7.0   |
| d. Avg. interest earned on<br>loan portfolio              | 11.1       | 13.8  | 14.5  | 10.5  | 9.1   |
| e. Avg. interest paid on deposit                          | 12.4       | 13.3  | 13.3  | 10.4  | 6.8   |
| f. Avg. spread available to<br>cover administrative costs | 1.9        | 3.2   | 3.1   | 1.2   | 2.3   |

/a The totals do not add up due to eliminations.

REPUBLIC OF KOREA  
FOURTH AGRICULTURAL CREDIT PROJECT

Primary Cooperatives: Balance Sheets 1980-83  
(Won million)

| As of December 31,             | 1980      | 1981      | 1982      | 1983      |
|--------------------------------|-----------|-----------|-----------|-----------|
| <b>Assets</b>                  |           |           |           |           |
| <u>Credit and Banking</u>      |           |           |           |           |
| Currency and checks            | 25,979    | 37,792    | 52,491    | 65,611    |
| Due from NACF                  | 291,108   | 406,286   | 455,700   | 398,788   |
| Loans from mutual credit funds | 527,993   | 750,383   | 1,213,793 | 1,367,905 |
| <br>Government loans           |           |           |           |           |
| Production, short-term         | -         | 135,558   | 177,773   | 217,063   |
| Agriculture development        | -         | 78,621    | 97,179    | 121,219   |
| National investment            | -         | 71,461    | 104,930   | 136,452   |
| Mechanization                  | -         | 87,421    | 146,678   | 213,626   |
| Rural housing                  | -         | 322,036   | 337,778   | 366,320   |
| Others                         | -         | 116,264   | 119,424   | 149,171   |
| Subtotal                       | 620,578   | 811,361   | 983,762   | 1,203,851 |
| Others                         | 103,162   | 151,532   | 99,067    | 126,672   |
| Total Credit and Banking       | 1,568,820 | 2,157,354 | 2,804,813 | 3,162,827 |
| <u>Nonbanking Business</u>     |           |           |           |           |
| Trade receivables              | 81,353    | 94,202    | 104,989   | 144,002   |
| Inventories                    | 230,243   | 92,161    | 76,937    | 91,347    |
| Mutual insurance               | 27,145    | 41,184    | 51,838    | 48,261    |
| Miscellaneous                  | 4,672     | 208,671   | 280,758   | 276,680   |
| Paid in stock to NACF          | 25,344    | 27,207    | 28,318    | 29,425    |
| Fixed assets                   | 163,749   | 188,210   | 225,104   | 249,333   |
| Others                         | 797       | 1,647     | 1,345     | 1,521     |
| Total Nonbanking Business      | 533,303   | 653,382   | 769,289   | 840,569   |
| Total Assets                   | 2,102,123 | 2,810,736 | 3,574,102 | 4,003,396 |
| <b>Liabilities</b>             |           |           |           |           |
| <u>Credit and Banking</u>      |           |           |           |           |
| Deposits                       | 823,784   | 1,163,315 | 1,571,487 | 1,730,707 |
| <br>Funds borrowed             |           |           |           |           |
| Mutual credit                  | 63,012    | 59,493    | 135,144   | 128,796   |
| Loanable funds                 | 351,670   | 810,242   | 949,956   | 1,174,774 |
| Facilities                     | 59,858    | 62,538    | 56,299    | 51,763    |
| Others                         | 295,146   | 44,451    | 54,132    | 75,176    |
| Subtotal                       | 769,686   | 976,724   | 1,195,531 | 1,430,509 |
| Miscellaneous                  | 50,583    | 72,564    | 87,454    | 88,840    |
| Others                         | 930       | 1,680     | 2,416     | 2,158     |
| Total Credit and Banking       | 1,645,983 | 2,214,283 | 2,856,888 | 3,253,042 |
| <u>Nonbanking Business</u>     |           |           |           |           |
| Trade payables                 | 239,734   | 106,790   | 90,813    | 108,055   |
| Mutual insurance               | 32,670    | 44,720    | 58,745    | 49,347    |
| Miscellaneous                  | 5,778     | 207,297   | 296,222   | 287,504   |
| Allowance and others           | 12,171    | 37,745    | 50,341    | 76,122    |
| Total Nonbanking Business      | 290,353   | 396,552   | 496,121   | 521,028   |
| <u>Capital and Surplus</u>     |           |           |           |           |
| Subscribed capital             | 126,212   | 144,567   | 156,276   | 166,447   |
| Surplus                        | 24,116    | 35,934    | 42,947    | 41,188    |
| Total Capital and Surplus      | 150,328   | 180,501   | 199,223   | 207,635   |
| <u>Profit or Loss</u>          | 15,459    | 19,400    | 21,870    | 21,601    |
| Total Liabilities and Capital  | 2,102,123 | 2,810,736 | 3,574,102 | 4,003,396 |

REPUBLIC OF KOREA

FOURTH AGRICULTURAL CREDIT PROJECT

Primary Cooperatives: Income Statements, 1980-83  
(Won million)

| Year ending December 31,               | 1980           | 1981             | 1982             | 1983             |
|--|----------------|------------------|------------------|------------------|
| <b>Income</b>                          |                |                  |                  |                  |
| <u>Credit and Banking</u>              |                |                  |                  |                  |
| Interest on loans                      | 220,408        | 341,744          | 379,319          | 381,677          |
| Interest on due                        | 61,738         | 80,595           | 96,330           | 33,800           |
| Fees and commissions                   | 1,063          | 2,404            | 1,791            | 2,144            |
| Other income                           | 25,547         | 47,882           | 50,344           | 59,773           |
| Subtotal                               | <u>308,756</u> | <u>472,625</u>   | <u>497,784</u>   | <u>477,394</u>   |
| <u>Nonbanking Business</u>             |                |                  |                  |                  |
| Purchase                               | 255,631        | 278,212          | 280,153          | 247,737          |
| Living materials                       | 105,758        | 123,433          | 140,751          | 222,566          |
| Sales                                  | 252,596        | 148,849          | 124,164          | 134,837          |
| Warehouse                              | 21,945         | 28,143           | 38,708           | 42,046           |
| Utilization                            | 1,451          | 2,154            | 1,972            | 1,748            |
| Processing                             | 3,793          | 3,891            | 3,247            | 2,618            |
| Transportation                         | 6,074          | 8,023            | 9,299            | 9,793            |
| Mutual insurance                       | 10,605         | 12,880           | 16,648           | 14,978           |
| Guidance                               | 1,272          | 132              | 91               | 1,166            |
| Nonbusiness and special income         | 4,970          | 7,958            | 15,562           | 15,704           |
| Other                                  | -              | -                | 3,930            | 3,902            |
| Subtotal                               | <u>664,095</u> | <u>613,675</u>   | <u>634,525</u>   | <u>697,095</u>   |
| <u>Total of Gross Income</u>           | <u>972,851</u> | <u>1,086,300</u> | <u>1,132,309</u> | <u>1,174,489</u> |
| <b>Expenses</b>                        |                |                  |                  |                  |
| <u>Credit and Banking</u>              |                |                  |                  |                  |
| Interest on deposits                   | 126,552        | 192,417          | 217,221          | 185,260          |
| Interest on borrowings                 | 108,665        | 166,659          | 144,375          | 150,650          |
| Other expenses                         | 20,579         | 36,150           | 38,991           | 35,305           |
| Subtotal                               | <u>255,796</u> | <u>395,226</u>   | <u>400,587</u>   | <u>371,215</u>   |
| <u>Nonbanking Business</u>             |                |                  |                  |                  |
| Purchase                               | 238,376        | 251,938          | 261,251          | 225,570          |
| Living materials                       | 97,242         | 114,349          | 132,427          | 210,955          |
| Sales                                  | 244,168        | 138,539          | 115,409          | 125,098          |
| Warehouse                              | 8,753          | 9,758            | 11,959           | 11,952           |
| Utilization                            | 1,413          | 2,454            | 1,929            | 1,864            |
| Processing                             | 3,189          | 3,101            | 2,536            | 1,997            |
| Transportation                         | 5,310          | 7,261            | 7,419            | 7,387            |
| Mutual insurance                       | 5,451          | 6,995            | 7,764            | 7,374            |
| Guidance                               | 4,846          | 6,030            | 7,171            | 8,250            |
| Nonbusiness and special income         | 1,329          | 2,475            | 1,504            | 1,672            |
| Other                                  | -              | -                | 3,548            | 3,720            |
| Subtotal                               | <u>609,077</u> | <u>542,900</u>   | <u>552,917</u>   | <u>605,839</u>   |
| <u>General Administrative Expenses</u> |                |                  |                  |                  |
| Personnel expenses                     | 72,356         | 86,565           | 101,704          | 113,167          |
| Retirement grants                      | -              | 8,257            | 10,249           | 11,432           |
| Expenditures                           | 18,948         | 32,553           | 41,897           | 47,753           |
| Public taxes                           | -              | -                | 303              | 611              |
| Subtotal                               | <u>91,304</u>  | <u>127,375</u>   | <u>154,153</u>   | <u>172,963</u>   |
| <u>Total of Gross Expenses</u>         | <u>956,177</u> | <u>1,065,501</u> | <u>1,107,657</u> | <u>1,150,017</u> |
| <u>Profit Before Corporation Tax</u>   | <u>16,674</u>  | <u>20,799</u>    | <u>24,652</u>    | <u>24,472</u>    |
| Corporation tax                        | 1,215          | 1,399            | 2,782            | 2,781            |
| <u>Profit After Corporation Tax</u>    | <u>15,459</u>  | <u>19,400</u>    | <u>21,870</u>    | <u>21,691</u>    |

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FOURTH AGRICULTURAL CREDIT PROJECT

Estimated Disbursement Schedule  
(US\$ million)

| <u>IBRD</u><br>fiscal year<br>and semester | Disbursements | Cumulative |
|--|---------------|------------|
| <u>1986</u>                                |               |            |
| 1st  | 5.0           | 5.0        |
| 2nd  | 3.5           | 8.5        |
| <u>1987</u>                                |               |            |
| 1st  | 3.5           | 12.0       |
| 2nd  | 4.0           | 16.0       |
| <u>1988</u>                                |               |            |
| 1st  | 4.0           | 20.0       |
| 2nd  | 2.5           | 22.5       |
| <u>1989</u>                                |               |            |
| 1st  | 2.5           | 25.0       |
| 2nd  |               |            |

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FOURTH AGRICULTURAL CREDIT PROJECT

Related Documents and Materials Available in Project File

A. Selected reports and studies relating to the sector or the subsector

1. IBRD, Republic of Korea Agricultural Sector Survey  
Report No. 4709-KO, April 1984.

B. Selected reports and studies relating to the project

1. NACF, (Preparation Report for) The First Agricultural Sector Loan  
December 1983
2. NACF, Supplementary Data for Appraisal, June 1984

C. Selected working papers

List of Supporting Tables

1. Audited Balance Sheets, 1979-83.
2. Audited Income Statements, 1979-1983.
3. Indicators of Financial and Operational Performance, 1979-1983.
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17. Analysis of Dues from Government, 1979-83.
18. Primary Cooperatives: Balance Sheets, 1980-83.
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20. Primary Cooperatives: Indicators of Operational and Financial Performance, 1980-83.
21. Selected Performance Indicators for First Agricultural Credit Project.
22. Selected Performance Indicators for Second Agricultural Credit Project.
23. Selected Performance Indicators for Third Agricultural Credit Project.

**REPUBLIC OF KOREA  
FOURTH AGRICULTURAL CREDIT PROJECT  
National Agricultural Cooperative Federation  
Organization Chart**





